ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time	May 1, 2003/ 9 am
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Purpose of Contact Develop Characterization Plan for the Incinerator

Discussion
A meeting was held at 9am on Thursday, May 1, 2003 to discuss the path forward for the newly discovered Incinerator Based on these discussions, and a site visit of the groundwater seeps, following are the agreed upon characterization approach and hold points Also included are additional data requested at the meeting Groundwater data from nearby wells will be provided by May 12th along with existing data from the nearby borehole

Background information

IHSS 133 6 – Concrete Wash Area was an area used during plant construction to washout concrete trucks prior to leaving Site Excess, clean concrete up to 5 feet thick is present in some locations and is being removed as a Best Management Practice Because the concrete is not contaminated, this activity is not a remedial action As described in the Contact Record dated March 17, 2003, samples were collected under the excess concrete on March 17, 2003 to close out the IHSS

The former incinerator, IHSS 133 5, was known to be in this area based on old aerial photos The exact location could not be determined because the concrete washout in this area is up to 8 feet thick It was suspected that the Incinerator slab, or portions of the Incinerator structure, might still be present, so excavation began in the area where the slab was expected first Sampling was planned for this area even if the slab was not found, to determine if a release to the environment had occurred due to incinerator operations The slab was not found at the expected location and samples were collected on April 16, 2003 as described in the Contact Record dated March 17, 2003

On April 24th, while concrete removal was underway at this IHSS, the southern face of the Incinerator was uncovered sufficiently enough to be identified The incinerator is built into the hillside and it appears that, based on old photos, the structure was partially backfilled along the north, east and west sides at that time The 1952 engineering drawings indicate that the slab thickness is 1' 3" No utilities are shown on the drawings, and recent interviews with several workers indicate that the materials within the Incinerator were lit using a propane torch or matches

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Because it was found on the last working day of the week and rain was forecast for the weekend, the excavation was partially backfilled to keep precipitation away from the Incinerator and to allow the excavation to drain About the upper 10 feet of Incinerator was left exposed The roof had been buried by about a foot of soil, and about half the roof area was exposed Radiological surveys of part of the outside surfaces of the Incinerator and the equipment were performed and were negative

Additional radiological surveys of the exposed Incinerator sides and roof were performed on Monday, April 26th A slightly elevated area was found on the roof near the former location of the Incinerator Stack Activities at this area were detectable but well below action limits (i e this material is free releasable)

Unrelated to the Incinerator, lab debris with elevated beta radiation was discovered about 300 feet south of the Incinerator on May 1, 2003 The Historical Release Report for the area describes that noncombustible glassware and trash was collected in a nearby dumpster, so this type of material was not unexpected The immediate area where the trash was found is posted as a radioactive material area and the material will be removed and disposed as waste

Characterization Approach
The following sampling approach was developed to ensure that there were sufficient controls on the sampling process to proceed without requiring a SAP Addendum In addition to the sampling effort, groundwater data from nearby wells will be provided for use in the decision making process

1) Sample roofing material for asbestos The exposed roof is covered with roofing materials The sampling was completed on April 24th and this material was found to be 20% asbestos containing material (ACM)
2) Obtain soil samples of the fill material on top of and surrounding the incinerator The origin of the fill dirt is unknown and the samples will be analyzed for radionuclides, metals and volatile organic compounds (VOCs) in the onsite lab Samples were collected on April 29th Results are expected by May 2nd Preliminary gamma spec results do not show elevated radioactivity Semi volatile organic compound (SVOC) samples were also collected and will be analyzed offsite with results expected in 2 weeks
3) **Hold Point** – No additional sampling activities will proceed until the radionuclide, metals and VOC soil sample results are received If soil results are below action levels, then excavation of the Incinerator will proceed to allow additional sampling SVOC results will not delay the following activities The excavated soil will remain in the immediate area If soil samples are above action levels, then a decision on how to proceed will be made in consultation with the regulators If only the soil on top of the incinerator is above action levels, then excavation of the sides may proceed without disturbing these soils The excavation process follows, although it may be modified in response to field conditions
4) To avoid hazards from falling soil and other materials, the soil will be removed from the top of incinerator first using manual methods, exposing roofing materials and any potential hazards associated with the former stack and hopper locations Qualified asbestos workers will remove roofing materials and this waste will be disposed offsite as ACM If hazards exist, mitigate as necessary Verify the type of fill material, if any is present, at the former stack and hopper locations
5) Excavate the south side of incinerator, including the southernmost portions of the east and west walls that were exposed when the Incinerator was operating Be alert for the presence of ash in the fill material and be prepared to segregate and sample as necessary
6) As evident from the original construction photos, a fire door or similar opening is present about half way down the Incinerator When the fire door is exposed on the west side, stop excavating, leaving a safe access for a sampler to the door Open or remove door as

required Take photographs as possible No entry into the Incinerator will be allowed Samples will be collected as follows

a) Beryllium and rad swipes will be collected from inside the Incinerator by a sampler wearing a full-face respirator and using a pole or other extension device

b) Collect soil/ash samples if present using an extension device Analyze at the onsite lab to get quick-turnaround total metals and radionuclides results Additional samples will be collected if needed to satisfy waste acceptance criteria

c) Collect firebrick or asbestos containing materials as possible for offsite asbestos analysis and onsite metals and radionuclide analysis

d) When sampling is complete, the door will be closed or the opening otherwise sealed if the opening will be left exposed for extended periods

7) Excavate to near the original ground surface, exposing the two openings on the south side of the Incinerator in a manner that safely allows sampler access to these openings Obtain radiological and beryllium swipes, photographs and soil/ash samples as described in item 6 above When sampling is complete, the door will be closed or the opening otherwise sealed

8) Excavate along the southernmost portions of the east and west walls that were exposed when the Incinerator was operating Be alert for the presence of ash material in the fill dirt and be prepared to segregate as necessary For samples proposed east and west of the Incinerator, locate the most likely sample locations, potentially using the lower wing walls shown on the 1952 Engineering Drawings for guidance As possible, excavate along the slope shown in earlier photos Two samples are planned for the east side of the Incinerator and one on the west side as per the attached sketch map However, actual sample locations may vary depending on field conditions and the presence of ash or staining

9) Continue excavating to expose the original road surface south of the Incinerator Ground surface elevations are available from the 1952 Engineering Drawings and will be used to guide the excavation As above, two samples are planned to be collected from the area in front of the Incinerator including soils from directly beneath the ash trays/chutes However, sample locations will be biased to the areas with the most evidence or likelihood of potential contamination from ash or other spills The attached sketch map shows the proposed locations although the actual field locations will be biased to areas with visible staining or other indications of ash storage

   a) Analyze the soil samples for radionuclides, metals, VOCs, and dioxins/furans

      i) Samples will be analyzed onsite for radionuclides and VOCs

      ii) Metal samples will be sent offsite for full suite totals analyses including beryllium

      iii) Dioxin/furan samples will be analyzed offsite using method 8290 This analysis method is currently available to the project and will more quickly provide information on the presence or absence of the dioxins and furans but will not provide additional information on the presence or absence of the congeners Results will indicate the presence of these compounds, indicate whether a remedial action is required, and indicate whether additional analyses are required

   b) Additional samples may be required depending on the results and will be determined using the consultative process

10) As soon as possible, collect seep samples from two downgradient seeps identified in the walkdown on May 1, 2003 One seep location has a slotted pipe that can be used for sampling, the other does not Water samples will be analyzed for radionuclides by gamma spectroscopy, and total metals

11) Perform radiological surveys of the exterior surfaces of the Incinerator sufficiently for waste characterization

12) **Hold Point-** No further activities will occur until results are received and discussed with the regulatory agencies Based on the data, the decision will be made on how to disposition the Incinerator

a) At this time, it is anticipated that all portions of the incinerator will be removed that were once in contact with ash The footings and wing walls may be left in place if uncontaminated

b) Depending on the sampling results, additional groundwater wells or surface water sampling may be required

c) A data summary or similar report will be developed with the results of the path forward approach along with an explanation of why this approach was taken

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Contact Record Prepared By Annette Primrose

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